

REMARKS

The application has been carefully reviewed in light of the Office Action dated December 1, 2005. Claims 1, 4 to 14, and 16 to 18 are in the application, of which Claims 5 to 14 and 16 are withdrawn from consideration. Claim 1 is the sole independent claim under consideration. Claims 2, 3, and 15 have been cancelled without prejudice. Claims 1 and 4 have been amended, which amendments include the incorporation of subject matter from Claims 2 and 3 into Claim 1. The specification has been amended. Reconsideration and further examination are respectfully requested.

The drawings were objected to for not including references signs mentioned in the description (440, 701, 300A, and 440A), and for using the same reference sign to designate different parts (100). In addition, the drawings were objected to for the reason that the reference sign 600 points to the wrong portion of the exposure apparatus 1A.

The specification has been amended to remove the references signs 440 and 701. The other matters raised in the drawing objections have been attended to in the three replacement drawings sheets submitted herewith. In particular, in Fig. 6, reference sign 600 has been redirected to point to the portion of the exposure apparatus 1A including 630 and 640; in Fig. 7B, the reference sign 440A has been added; and in Fig. 9. the reference sign "300" has been changed to read --300A--.

The specification has been objected to for alleged informalities. This matter has been attended to by the amendments made to the specification.

Claims 1 and 4 were objected to for informalities, and Claims 2 to 4 were rejected under 35 U.S.C. § 112, second paragraph. The objection and rejection are

respectfully traversed, and are submitted to have been obviated by the amendments made to Claims 1 and 4.

Claims 1 and 4 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,236,033 (Ebbesen). Claim 15 was rejected under 35 U.S.C. § 102(e) over U.S. Publication No. 2002/0196420 (Naya). Claims 1 to 4 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,171,730 (Kuroda '730) or U.S. Patent No. 6,187,482 (Kuroda '482) in view of the article entitled “Sub-diffraction-limited patterning using evanescent near-field optical lithography” (Alkaisi). The rejections are respectfully traversed.

Claim 1 recites, *inter alia*, projecting exposure light that is polarized in a direction of an angle of approximately 45° with respect to the lengthwise directions of the opening.

The Office Action concedes that Kuroda '730 and Kuroda '482 do not disclose the above-discussed feature. Yet, placing reliance on Alkaisi, the Office Action asserts that the invention would nevertheless have been obvious. Applicants respectfully submit that such reliance is misplaced.

Alkaisi describes, in reference to Fig. 2, that the rectangular apertures are long with respect to wavelength, so high transmission of one polarization will always be possible. See p. 3561 (col. 1, para. 5) of Alkaisi. Alkaisi further describes, in reference to Fig. 3, that TM polarized incident radiation is higher in light transmission than TE polarized radiation. See p. 3562 (col. 1, para. 3 to col. 2, para. 1) of Alkaisi. However, nowhere is Alkaisi seen to describe projecting exposure light that is polarized in a direction

of an angle of approximately 45° with respect to the lengthwise directions of the opening.

The Office Action states that it would have been logically expected that the intensity of exposure light on the resist under both the first and second mutually orthogonal directions can be at least nearly equalized when the exposure light is linearly polarized in a direction at an angle of approximately 45° with respect to the first and second lengthwise mutually orthogonal directions. See page 13, lines 12 to 18 of Office Action. This statement is unsupported by documentary evidence, and as such, is believed to be based on a common knowledge or “well known” prior art rationale. Accordingly, if this statement is repeated in the next Office Action, Applicants respectfully request that the Examiner produce authority to support the statement. See MPEP § 2144.03 (B and C).

Neither Ebbeson nor Naya is seen to remedy the foregoing deficiencies of Kuroda ‘730, Kuroda ‘482, and Alkaisi.

Dependent Claims 4, 17, and 18 are also submitted to be patentable because they set forth additional aspects of the present invention and are dependent from the independent claim discussed above. Therefore, separate and individual consideration of each of these dependent claims is respectfully requested.

The application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,



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